

CRANE FALLS LAKE PROGRESS REPORT

1 January to 15 July 1977

Interval VI (21 May-17 June 1977)

An estimated 909 anglers fished 3,359 hours in Crane Falls Lake during Interval VI (21 May-17 June) to catch 751 rainbow trout and 472 largemouth bass (Table 1). Approximately 9% of the rainbow caught were the result of fingerling releases and about 91% were the result of catchable releases. Anglers kept about 95% of the rainbow caught and released 5%. Anglers caught rainbow trout at the rate of 0.22 fish per hour and largemouth bass at a rate of 0.14 during the interval.

Table 1. Estimated effort and catch from Crane Falls Lake during census Interval VI (21 May-17 June 1977) by angler type.

Angler Type	Anglers	Hours	Rb (f)	Rb (c)	Rb (Rel)	Lmb	Lmb (Rel)
Bank-bait	374	1,383.94	14	163	--	14	--
Boat-bait	245	929.65	38	304	--	--	--
Boat-lures	115	379.72	--	38	--	304	57
Tube-lures	58	272.19	10	19	--	--	87
Tube-flies	107	354.72	--	126	39	--	--
Tube-bait	10	38.60	--	--	--	--	--
Totals	909	3,358.82	62	650	39	318	154

Interval VII (18 June-15 July 1977)

Angler pressure dropped off severely during Interval VII. An estimated 386 anglers fished 1,422 hours in Crane Falls Lake during Interval VII to catch 31 rainbow trout, 435 largemouth bass and 28 bullheads (Table 2).

Table 2. Estimated effort and catch from Crane Falls Lake during census Interval VII (18 June-15 July 1977) by angler type.

Angler Type	Anglers	Hours	Rb (f)	Rb (c)	Rb (rel)	Lmb	Lmb (rel)	Bull-head
Bank-Bait	172	510.65	--	14	--	14	18	1
Bank-flies	15	41.40	--	--	--	39	5	--
Bank-lures	45	138.02	--	--	--	22	--	--
Boat-lures	68	486.97	--	--	--	271	--	--
Boat-bait	27	54.11	--	--	--	--	--	27
Tube-flies	59	191.24	7	10	--	33	33	--
Totals	386	1,422.39	7	24	--	379	56	28

Total Catch and Harvest (1 January-15 July 1977)

During the first seven census intervals (1 January-15 July 1977 an estimated 4,237 anglers fished 15,502 hours to catch 4,003 rainbow trout, 941 largemouth bass and 28 bullheads from Crane Falls Lake (Table 3). About 15% of the rainbow harvested were the result of fingerling releases and 85% the result of catchable plants. Anglers kept about 70% of the trout that they caught and released 30%. Anglers caught rainbow at a rate of 0.26 fish per hour. Anglers kept 77% of the largemouth bass caught and released 23%.

Largemouth Bass

Two separate electrofishing operations were conducted at Crane Falls Lake during 1977 to assess bass numbers. The first sampling occurred on 2-3 May and the second on 21-23 June. Population size was estimated by a mark-recovery index.

We estimated a largemouth population of 3,759 fish from our 2-3 May sample. About 40 surface acres of the lake appear to be bass habitat at this time of year. Utilizing 40 acres we would estimate 94 largemouth per surface acre. If, however, largemouth utilize the entire lake (94 surface acres) during the summer months, then our estimate would be 40 fish per acre.

During the 21-23 June sample we estimated a largemouth population of 2,225 fish (56/SA for 40 acres and 24/SA for 94 acres). This estimate was 1,534 fish less than that of 2-3 May and was probably accounted for by fishing harvest, natural mortalities and/or sampling error.

Table 3. Estimated effort and catch from Crane Falls Lake during the first five census intervals (1 January-15 July 1977).

Interval	Anglers	Hours	Rb (f)	Rb (c)	Rb (rel)	Lmb	Lmb (rel)	Bull- head
I (1 Jan)	143	603.76	6	133	0	0	0	0
II (29 Jan)	372	1,556.66	74	407	420	0	0	0
III (26 Feb)	1,047	3,313.44	150	446	290	0	0	0
IV (26 Mar)	821	2,950.12	78	539	338	0	0	0
V (23 Apr)	559	2,296.53	49	160	131	25	9	0
VI (21 May)	909	3,358.82	62	650	39	318	154	0
VII (18 June	386	1,422.39	7	24	0	379	56	28
Totals	4,237	15,501.72	426	2,359	1,218	722	219	28

Other studies indicate that if each age class is not treated separately that estimates may be as much as 28% low. Since we did not use individual age class breakdowns the current total for 2-3 May could be as high as 5,221 fish and the total for 21-23 June as high as 3,090 fish.

Largemouth size averaged 220 mm (8.7 in) in the May sample and 255 mm (10.0 in) in the June sample, or growth of 35 mm (1.4 in). Minimum size for the May sample was 85 mm (3.3 in) and for the June sample 125 mm (4.9 in).

Bass were grouped into four age classes by scale analysis of the June sample. Age 1+ fish ranged from 120-160 mm (4.7-6.3 in) in length, age II+ from 230-260 mm (9.1-10.2 in), age III+ from 270-320 mm (10.6-12.6 in) and age IV+ from 335-370 mm (13.2-14.6 in).

Largemouth densities, age class structure and size indicate a well established, healthy and growing population.

Discussion

Crane Falls Lake excited little angler interest during June and early July. Relatively few rainbow were taken during this period with bass dominating the catch. Most of the anglers utilizing the area fished Cove Arm Reservoir for crappie or catchable rainbow.

We have not observed any fish in the harvest this year that appear to be last year's fingerling plant of rainbow or hybrids. This group of fish may appear this fall as the water temperatures decline. At present, it appears that this release of fish did not survive well. Past records indicate that releases of fingerlings in Crane Falls had mixed success. Fingerling releases provided a large portion of the fishery in many years but in 1961 survival of the fingerling release was poor (Richards), as was the 1964 release (Platts) and the 1966 release (Webb). Webb reported that there was heavy predation on the 1967 release by large trout in the lake. Most of the biologists that have managed the lake indicate that marginal water quality is probably the reason for the periodical failure of fingerling releases.